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ATTORNEY DOCKET 1094-27

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Shan et al.

Serial No.: 10/795,771

Group Art Unit: 1755

Filed: March 8, 2004

Date: August 18, 2004

For: MESOPOROUS ALUMINUM OXIDE,  
PREPARATION AND USE THEREOF

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to Applicant(s) duty of disclosure, the information listed on the attached form PTO-1449 is brought to the attention of the Examiner. A copy of the listed foreign patents and U.S. publications are enclosed.

The citation of the listed items is not a representation that they constitute a complete or exhaustive listing of the relevant art or that the references are prior art. The items listed are submitted in good faith, but are not intended to a substitute for the Examiner's search. It is hoped, however, that in addition to apprising the Examiner of these particular items, they will assist in identifying fields of search and in making as full and complete a search as possible.

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CERTIFICATION UNDER 37 C.F.R. § 1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: August 18, 2004

Maria Goldman  
Maria Goldman

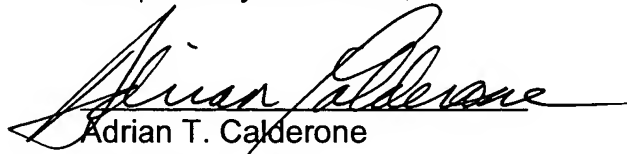
The filing of this information disclosure statement is not an admission that the information cited herein is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

- ☐ This information disclosure statement is being filed within three (3) months of the filing date of this application.
- ☐ This information disclosure statement is being filed within three (3) months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application.
- ☒ To the best of Applicant(s) knowledge, this information disclosure statement is being filed before the date of mailing of a first Office Action on the merits in connection with this case.
- ☐ Enclosed herewith is a certificate under 37 C.F.R. § 1.97(e)(1).
- ☐ Enclosed herewith is a petition under 37 C.F.R. § 1.97(d)(ii).
- ☐ Enclosed by check is the petition fee of \$130.00. 37 C.F.R. § 1.17(i)(1))
- ☐ Please charge the **\$130.00** petition fee to Deposit Account No. **04-1121**.
- ☐ Enclosed by check is the **\$180.00** fee required by 37 C.F.R. § 1.17(p).
- ☐ Please charge the **\$180.00** fee required by 37 C.F.R. § 1.17(p) to Deposit Account No. **04-1121**.

**[X]** Please charge any deficiency as well as any other fee(s) which may become due under 37 C.F.R. § 1.16 and/or 1.17 at any time during the pendency of this application, or credit any overpayment of such fee(s) to Deposit Account **04-1121**. Also, in the event any extensions of time for responding are required for the pending application(s), please treat this paper as a petition to extend the time as required and charge Deposit Account No. **04-1121** therefor.  
**TWO (2) COPIES OF THIS SHEET ARE ENCLOSED.**

Early and favorable consideration of the case is respectfully requested.

Respectfully submitted,

  
Adrian T. Calderone  
Reg. No. 31,746  
Attorney for Applicant(s)

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ATC:mg

Form PTO-1449

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
1094-27

SERIAL NO. 10/795,771

APPLICANTS Shan et al.

FILING DATE 3/8/04

GROUP ART UNIT 1755

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

several sheets if necessary)

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,098,684	3/24/1992	Kresge, et al.			
	5,102,643	4/7/1992	Kresge, et al.			
	5,622,684	4/22/1997	Pinnavaia, et al.			
	5,672,556	9/30/1997	Pinnavaia, et al.			
	5,863,515	1/26/1999	Davis, et al.			
	6,027,706	2/22/2000	Pinnavaia, et al.			
	6,146,602	11/14/2000	Narula, et al.			
	6,197,276	3/6/2001	Kolenda, et al.			
	6,214,312	4/10/2001	Kolenda, et al.			
	6,342,293	1/29/2002	Nakahara, et al.			
	6,358,486	3/19/2002	Shan, et al.			
	6,410,473	6/25/2002	Pinnavaia, et al.			

## FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
					YES	NO
WO 00/15551	3/23/2000	WO			X	

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	Huo et al., <i>Generalized Synthesis of Periodic Surfactant/Inorganic Composite Materials</i> , Nature, 368, 317-321 (1994)
	Tanev et al., <i>A Neutral Templating Route to Mesoporous Molecular Sieves</i> , Science, Vol. 267, 865-867, (1995)
	Jansen, et al., <i>A New Templating Method for Three-Dimensional Mesopore Networks</i> , Chem. Commun., 713-714 (2001)
	Bagshaw et al., <i>Templating of Mesoporous Molecular Sieves by Nonionic Polyethylene Oxide Surfactants</i> , Science, vol. 269, 1242-1244 (1995)
	Vaudry, et al., <i>Synthesis of Pure Alumina Mesoporous Materials</i> , Chem. Mater. 8, 1451-1464 (1996)
	Cabrera et al., <i>Surfactant-Assisted Synthesis of Mesoporous Alumina Showing Continuously Adjustable Pore Sizes</i> , Adv. Mater. vol. 11, No. 5, 379-381 (1999).
	Kim et al., <i>Ion Exchange and Thermal Stability of MCM-41</i> , J. Phys. Chem., 1995, Vol. 99, No. 45, 16742-16747 (1995)

EXAMINER	DATE CONSIDERED
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\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 1094-27		SERIAL NO. 10/795,771	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT  (Use several sheets if necessary)				APPLICANTS Shan et al.			
				FILING DATE 3/8/04		GROUP ART UNIT 1755	

U.S. PATENT DOCUMENTS							
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FOREIGN PATENT DOCUMENTS								
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)	
	Barrer, <i>Zeolites and their synthesis</i> , Zeolites, Vol. 1, pp. 130-140 (October 1981)
	Davis et al., <i>A molecular sieve with eighteen-membered rings</i> , Nature, Vol 331, pp. 698-699 (February 1988)
	Davis et al., <i>Zeolite and Molecular Sieve Synthesis</i> , Chem. Mater., Vol. 4, pp. 756-768 (1992)
	Gies et al., <i>The structure-controlling role of organic templates for the synthesis of porosils in the system SiO<sub>2</sub>/template/H<sub>2</sub>O</i> , Zeolites, Vol. 12, pp.42-49 (January 1992)
	Hearmon et al., <i>The protonation state of adamantanamine template after high-silica zeolite synthesis, studied by <sup>13</sup>C solid-state n.m.r.</i> , Zeolites, Vol. 10, pp.608-611 (July/Aug 1990)
	Beck et al., <i>A New Family of Mesoporous Molecular Sieves Prepared with Liquid Crystal Templates</i> , J. Am. Chem. Soc., Vol. 114, pp.10834-10843 (1992)

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